

**What is claimed is:**

1. A portable receiver, comprising:

an antenna for receiving broadcast waves;

a matching circuit to which signal received by the antenna is  
5 supplied via resistance component;

a receiver unit for demodulating received broadcast waves, to  
which output of the matching circuit is connected; and

an output means which outputs signal demodulated by the receiver  
unit,

10 wherein length of the antenna is shorter than a quarter  
wavelength of the broadcast wave; and

wherein impedance of the antenna as viewed through the  
resistance component from the matching circuit and input impedance  
value of the matching circuit are substantially equivalent.

15

2. The portable receiver of claim 1,

wherein the antenna is formed from rigid metal, and  
the matching circuit comprises a reactance element.

20

3. The portable receiver of claim 2,

wherein the reactance element has a minute resistance value that  
is substantially equivalent to the resistance component.

4. The portable receiver of claim 2,

25 wherein the broadcast wave is at least FM broadcast wave,

the receiver unit demodulates audio signal from the FM broadcast wave received; and

wherein the output means outputs the demodulated aaudio.

5        5. The portable receiver of claim 2,  
wherein the resistance component comprises a resistance element; and

wherein the resistance element is connected between the antenna and the matching circuit.

10

6. The portable receiver of claim 2,  
wherein the antenna comprises a movable section which is movable toward the matching circuit; and

wherein the resistance component formed by contact resistance  
15 of the movable section.

7. The portable receiver of claim 2, further comprising:  
a slide member which slides with the antenna,  
wherein the antenna slides with the slide member and can be put  
20 into or taken out of the portable receiver; and  
wherein the resistance component is formed at the slide member.

8. The portable receiver of claim 2,  
wherein an active element of a high-frequency amplifier  
25 comprising the receiver unit is arranged in the vicinity of output

of the matching circuit.

9. The portable receiver of claim 4, comprising:

a telephone unit for communication in a frequency band higher  
5 than the FM broadcast wave; and

a speaker for outputting telephone voice received and the  
demodulated audio,

wherein the antenna further transmits and receives electric  
waves of the telephone unit.

10

10. The portable receiver of claim 2,

wherein the broadcast wave is TV broadcast wave;

wherein the receiver unit demodulates video and audio signals  
from the TV broadcast waves received; and

15 wherein the output serves to output the demodulated video and  
audio.

11. The portable receiver of claim 10, further comprising:

a telephone unit for communication in a frequency band higher  
20 than the TV broadcast wave,

wherein the antenna further transmits and receives electric  
waves of the telephone unit;

wherein the output means comprises a display and a speaker;

wherein the display serves to display the demodulated video and  
25 an image received by the telephone unit; and

wherein the speaker serves to output the demodulated audio and telephone voice received by the receiver unit.

12. The portable receiver of claim 10,

5 wherein the TV broadcast wave band includes a first broadcast band, a second broadcast band that is higher in frequency band than the first broadcast band, and a third broadcast band that is higher in frequency band than the second broadcast band;

wherein the matching circuit comprises:

10 a capacitor connected between the input terminal and output terminal;

a first inductor with one end grounded and the other end connected to one end of the capacitor;

15 a second inductor with one end grounded and the other end connected to the other end of the capacitor; and

a switching means for switching the first inductor value according to the first broadcast band and the second broadcast band; and

20 wherein the first inductor displays inductance characteristic at the first broadcast band and the second broadcast band, and displays capacitance characteristic at the third broadcast band.

13. The portable receiver of claim 12,

25 wherein the switching means further switches the second inductor value according to the first broadcast band and the second broadcast

band; and

wherein the second inductor displays inductance characteristic at the first broadcast band and the second broadcast band, and displays capacitance characteristic at the third broadcast band.

5

14. The portable receiver of claim 12,

wherein the first inductor comprises a third inductor and a fourth inductor which are connected in series; and

wherein the switching means serves to short-circuit both  
10 terminals of the fourth inductor in receiving the second broadcast band.

15. The portable receiver of claim 14,

wherein the second inductor comprises a fifth inductor and a  
15 sixth inductor which are connected in series; and

wherein the switching means serves to short-circuit both terminals of the sixth inductor in receiving the second broadcast band.

20 16. The portable receiver of claim 14,

wherein the third inductor and the fourth inductor are connected by circuit patterns and are reflow-soldered.

17. The portable receiver of claim 14,

25 wherein the self-resonance point of the third inductor is set

between the second broadcast band and the third broadcast band.

18. The portable receiver of claim 14,

wherein the combined self-resonance point of the third inductor  
5 and the fourth inductor is set between the first broadcast band and  
the third broadcast band.

19. The portable receiver of claim 13,

wherein resistance of the antenna connected to an input terminal  
10 of the matching circuit and resistance of the matching circuit as  
viewed from the input terminal of the matching circuit are  
substantially equivalent to each other.